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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

23400

7590

03/17/2004

POSZ & BETHARDS, PLC 11250 ROGER BACON DRIVE SUITE 10 RESTON, VA 20190 EXAMINER

LAM, TUAN THIEU

ART UNIT PAPER NUMBER

2816

DATE MAILED: 03/17/2004

1	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/087 758	03/05/2002	Takamoto Watanahe	11-082	7380

TITLE OF INVENTION: TIME MEASUREMENT APPARATUS, DISTANCE MEASUREMENT APPARATUS, AND CLOCK SIGNAL GENERATING APPARATUS USABLE THEREIN  $\cdot$ 

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	06/17/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (703) 746-4000

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INSTRUCTIONS: This for appropriate. All further cor indicated unless corrected a maintenance fee notification	respondence including the local or directed otherwise	smitting the ISSU Patent, advance ore in Block 1, by (a)	E FEE and PUBLIC ders and notification ) specifying a new c	CATION FEE (if requ	ired). Blocks I through 4 swill be mailed to the current; and/or (b) indicating a sep	should be completed where correspondence address as arate "FEE ADDRESS" for
	E ADDRESS (Note: Legibly mark-up	with any corrections or	use Block 1)	Fee(s) Transmittal. Th	mailing can only be used fair certificate cannot be used al paper, such as an assignme of mailing or transmission.	for any other accompanying
POSZ & BETHARDS, PLC 11250 ROGER BACON DRIVE SUITE 10 RESTON, VA 20190				I hereby certify that the States Postal Service addressed to the Mai	rtificate of Mailing or Tran his Fee(s) Transmittal is beir with sufficient postage for fir il Stop ISSUE FEE address TO, on the date indicated be	ig deposited with the United rst class mail in an envelope a above, or being facsimile
« RESTON, VA 201	<b>,</b>					(Depositor's name)
						(Signature)
						(Date)
APPLICATION NO.	FILING DATE	1	FIRST NAMED INVEN	ITOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,758	03/05/2002		Takamoto Watana	be	11-082	7380
TITLE OF INVENTION: T USABLE THEREIN	TIME MEASUREMENT AI	PPARATUS, DIST	'ANCE MEASURE!	MENT APPARATUS,	AND CLOCK SIGNAL GE	NERATING APPARATUS
APPLN. TYPE	SMALL ENTITY	ISSUE FE	EE PI	UBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330		\$300	\$1630	06/17/2004
EXAM	INER	ART UN	IT C	LASS-SUBCLASS	]	
LAM, TUA	AN THIEU	2816		327-161000		
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			names of up to agents OR, altern	the patent front page, 3 registered patent a latively, (2) the name member a registered	ttorneys or 1of a single	
			agent) and the na	ames of up to 2 registrests. If no name is lister	ered patent	
		low, no assignee da submitted under sep	ata will appear on the parate cover. Comple	•• /	ssignee data is only appropri I a substitute for filing an ass UNTRY)	ate when an assignment hasignment.
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4a. The following fee(s) are	assignee category or catego enclosed:		. Payment of Fee(s):	G individual G	corporation of outer private g	Toup entity 2 governmen
☐ Issue Fee			☐ A check in the arr	ount of the fee(s) is en	closed.	
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☐ Advance Order - # of 6	Copies	<del></del>	The Director is he Deposit Account Nu		harge the required fee(s), or (enclose an extra c	
Director for Patents is reques	sted to apply the Issue Fee ar	nd Publication Fee	(if any) or to re-appl	y any previously paid i	ssue fee to the application ide	entified above.
(Authorized Signature)		(Date)	<u> </u>			
NOTE; The Issue Fee and other than the applicant; interest as shown by the red	I Publication Fee (if require a registered attorney or age cords of the United States Pa	ed) will not be accent; or the assignentent and Trademark	cepted from anyone ee or other party in k Office.			
This collection of informa obtain or retain a benefit lapplication. Confidentiality estimated to take 12 minut completed application for case. Any comments on suggestions for reducing the Patent and Trademark (22313-1450. DO NOT S SEND TO: Commissioner Under the Paperwork Retention.	tion is required by 37 CFR by the public which is to five is governed by 35 U.S.C. I es to complete, including gent to the USPTO. Time will the amount of time your his burden, should be sent END FEES OR COMPLE for Patents, Alexandria, Virguation Act of 1995, no gentlement of the complete of the complete for Patents, Alexandria, Virguation Act of 1995, no gentlement of the complete of the complete for Patents, Alexandria, Virguation Act of 1995, no gentlement of the complete for the complete for the complete for Patents, Alexandria, Virguation Act of 1995, no gentlement of the complete for the c	1.311. The inform the (and by the US 22 and 37 CFR 1.1 athering, preparing, Il vary depending require to complet to the Chief Inform of Commerce, A TED FORMS TO ginia 22313-1450.	nation is required to PTO to process) an 4. This collection is 4, and submitting the upon the individual to this form and/or nation Officer, U.S. lexandria, Virginia THIS ADDRESS.			
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## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/087,758	03/05/2002	Takamoto Watanabe	11-082	7380	
23400	7590 03/17/2004	[	EXAMINER		
	POSZ & BETHARDS, PLC 11250 ROGER BACON DRIVE			LAM, TUAN THIEU	
SUITE 10	BACON DRIVE		ART UNIT	PAPER NUMBER	
RESTON, VA 2	ESTON, VA 20190		2816		
			DATE MAILED: 03/17/200	4	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)
	10/087,758	WATANABE ET AL.
Notice of Allowability	Examiner	Art Unit
	Tuan T. Lam	2816
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commining GHTS. This application is:	th the correspondence address n this application. If not included unication will be mailed in due course. THIS
1. 🖾 This communication is responsive to the amendment filed	<u>1/20/2004</u> .	
2. The allowed claim(s) is/are 8-13 and 23-28.		
3. A The drawings filed on 19 April 2002 are accepted by the Ex	kaminer.	
<ul> <li>4.  Acknowledgment is made of a claim for foreign priority unanal</li></ul>	been received. been received in Application cuments have been receive of this communication to file ENT of this application.	on No  d in this national stage application from the a reply complying with the requirements
<ol> <li>A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give</li> </ol>	itted. Note the attached EX es reason(s) why the oath o	AMINER'S AMENDMENT or NOTICE OF r declaration is deficient.
6. CORRECTED DRAWINGS ( as "replacement sheets") mus	t be submitted.	
(a) including changes required by the Notice of Draftspers		v ( PTO-948) attached
1) hereto or 2) to Paper No./Mail Date		
(b) including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or	r in the Office action of
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the	.84(c)) should be written on t he header according to 37 CF	he drawings in the front (not the back) of FR 1.121(d).
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT I</li> </ol>	SIT OF BIOLOGICAL MATE FOR THE DEPOSIT OF BIO	ERIAL must be submitted. Note the DLOGICAL MATERIAL.
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. 🔲 Interview S	formal Patent Application (PTO-152) ummary (PTO-413),
<ul> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date</li> <li>Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	8), 7. Examiner's	Mail Date Amendment/Comment  Statement of Reasons for Allowance
		Tuan T. Lam Primary Examiner Art Unit: 2816

Application/Control Number: 10/087,758

Art Unit: 2816

1. The following is an examiner's statement of reasons for allowance: the amendment filed 1/20/2004 has overcome the prior art of record. The prior art of record fails to teach or fairly suggest the switch controlling means operates for determining the specified one among the switches on the basis of period data and ratio data, the period data representing a numeric value of a period of the reference clock signal while a time resolution is given by the prescribed signal delay time provided by each of the unit delay elements, the ratio data representing a ratio between a delay time of the shift clock signal relative to the reference clock signal and the period of the reference clock signal as called for in claim 8. Therefore, claims 8-13 and 23-28 are presently allowed.

Page 2

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Lam whose telephone number is 571-272-1744. The examiner can normally be reached on Monday to Friday (7:30 am to 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIMOTHY P CALLAHAN can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2816

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan T. Lam
Primary Examiner

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Art Unit 2816

3/9/2004